I-495 EXPRESS LANES
NORTHERN EXTENSION
Virginia Department of Transportation

PUBLIC INFORMATION MEETING

Cooper Middle School

May 20, 2019
Meeting Time: 6:30-8:30 p.m.
Presentation Begins: 7 p.m.
Agenda

- Welcome and introductions
- Background
- About the study
- Scope of the study
- Agency stakeholder coordination
- Schedule
- Questions and feedback
Purpose of Tonight’s Meeting

- Provide update on findings of environmental assessment including:
  - Existing conditions
  - Traffic analysis
- Present preliminary design
- Update on study schedule
- Update on project delivery
Background
I-495 Express Lanes History

- Final Environmental Impact Statement and Record of Decision issued by FHWA – June 2006
  - Included Express Lanes improvements to George Washington Memorial Parkway

- Environmental document (NEPA) reevaluations completed
  - May 2007 (revised IJR project limits to south of Old Dominion Drive)
  - June 2008
  - December 2008
  - May 2009
  - July 2009
  - Dulles Interchange November 2009

- Express Lanes and Dulles Interchange opened to traffic November 2012

- I-495 North Shoulder Lane Use Project (1½ mile Express Lanes merge to GW Parkway)
  - Study completed June 2014; Open to traffic June 2015

- VDOT began Environmental Assessment of 495 Northern Extension - May 2018
Project Goals and Objectives

- **Reduce congestion** – Regional travel demand forecasting shows increased traffic volumes and travel demands as population and employment continue to grow within the region;
- **Provide additional travel choices** – Access to high-occupancy travel modes encourages drivers to choose alternatives to single-occupancy travel as well as provide an option to single-occupancy drivers to use the Express Lanes and free up capacity on the GP lanes;
- **Improve travel reliability** – Duration and extent of congestion is expected to increase along with population and employment growth resulting in the need for commuters to spend additional time traveling to work.
Potential Express Lanes Access

### Dulles Toll Road (VA Route 267) at I-495

<table>
<thead>
<tr>
<th>Existing Express Lane Access</th>
<th>New Express Lane Access Under Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>495 South to Rt. 267 West</td>
<td>Rt. 267 East to 495 North</td>
</tr>
<tr>
<td>495 North to Rt. 267 West</td>
<td>Rt. 267 West to 495 North</td>
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<tr>
<td>Rt. 267 East to 495 South</td>
<td>495 South to Rt. 267 East</td>
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</tbody>
</table>

### George Washington Memorial Parkway (GWMP) at I-495 *

<table>
<thead>
<tr>
<th>Existing Express Lane Access</th>
<th>New Express Lane Access Under Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>n/a</td>
<td>495 North to GWMP East</td>
</tr>
<tr>
<td>n/a</td>
<td>GWMP West to 495 South</td>
</tr>
</tbody>
</table>

### New Access Between Express Lanes and General Purpose Lanes

<table>
<thead>
<tr>
<th>Existing Express Lane Access</th>
<th>New Express Lane Access Under Study</th>
</tr>
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<tbody>
<tr>
<td>n/a</td>
<td>495 North General Lanes to North Express</td>
</tr>
<tr>
<td>n/a</td>
<td>495 South Express to South General Lanes</td>
</tr>
</tbody>
</table>

*Analyzing options with and without direct connections to the George Washington Memorial Parkway

Note: Connections between Express Lanes and General Purpose Lanes will be shifted north from current locations
Project Elements

- NEPA environmental assessment
  - Build (with options)
  - No-build
- Traffic analysis
  - Operations
  - Safety
- Preliminary engineering
  - Engineering-level survey
  - Functional plan set
Scope of Environmental Assessment (NEPA)

Technical studies
• Air quality analysis
• Alternative analysis
• Hazardous materials
• Historic resources
• Indirect and cumulative effects
• Natural resources
• Noise analysis
• Socioeconomic and land use analysis
• Traffic analysis
Noise Analysis and Noise Walls

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**NEPA and Preliminary Design**
- Identify Noise Receptors
- Perform noise measurements at representative receptors along the corridor
- Perform noise modeling
- Identify impacts (is noise mitigation warranted?)
- Design and assess mitigation (typically noise walls)
- Present noise study results and preliminary noise wall locations at public hearings

**Final Design**
- Finalize noise barrier designs once the project has received design approval
- Obtain VDOT Chief Engineer approval
- Obtain FHWA concurrence
- Solicit public input from benefited property owners and renters (voting process)
- Incorporate approved noise wall(s) into the final road design construction plans
Scope of Traffic Analysis

- Operational and safety analysis
  - I-495 & Dulles Toll Road mainlines
  - Arterials within study corridor
- Comparison of build alternative (with options) versus no-build alternative
  - 2025 interim year
  - 2045 design year
- Traffic analysis shows impact on:
  - Traffic delay
  - Person throughput
  - Travel times
  - Secondary streets
- Traffic and Transportation Technical Report
- Interchange Justification Report
Reduced Travel Delays
(Preliminary Draft Results)

Freeway Average Speed Comparison - I-495 General Purpose Lanes

[Heatmap showing speed comparison for different times of the day across various roads such as River Road, Clara Barton, G.W. Parkway, Georgetown Pike, Dulles Toll Road, and Route 123.]
Reduced Travel Delays
(Preliminary Draft Results)

Freeway Average Speed Comparison - I-495 Express Lanes

2045 Build VISSIM Speed
2:15 PM 2:45 PM 3:15 PM 3:45 PM 4:15 PM 4:45 PM 5:15 PM

2045 No-Build VISSIM Speed
2:15 PM 2:45 PM 3:15 PM 3:45 PM 4:15 PM 4:45 PM 5:15 PM

Existing VISSIM Speed
2:15 PM 2:45 PM 3:15 PM 3:45 PM 4:15 PM 4:45 PM 5:15 PM

No Express Lanes in this section in Existing Conditions

No Express Lanes in this section in No-Build Conditions

Northbound I-495 Express Lanes
River Road
Clara Barton Parkway
G.W. Parkway
Georgetown Pike
Jones Branch Drive
Westpark Drive
Increased Person Throughput
(Preliminary Draft Results)

2045 PM Peak Hour Person Throughput - I-495 Northbound

<table>
<thead>
<tr>
<th>Route/Range</th>
<th>No-Build</th>
<th>Build</th>
</tr>
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<tbody>
<tr>
<td>Route 123 to Dulles Toll Road</td>
<td>2,500</td>
<td>2,840</td>
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<tr>
<td>Dulles Toll Road to Georgetown Pike</td>
<td>3,600</td>
<td>2,540</td>
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<tr>
<td>Georgetown Pike to GWMP</td>
<td>2,500</td>
<td>2,840</td>
</tr>
<tr>
<td>GWMP to Clara Barton (ALMB)</td>
<td>3,600</td>
<td>2,540</td>
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Improved Travel Times
(Preliminary Draft Results)
Traffic Analysis – Intersections

2045 No-Build Traffic Operations

2045 Build Traffic Operations
Preliminary Engineering

- Identify concepts for widening and connections
- Identify pedestrian/bicycle facility improvements
- Develop conceptual drainage and stormwater management designs using VDOT criteria II B
- Replacement of existing bridges
  - Old Dominion Drive (VA 783)
  - Georgetown Pike (VA 193)
  - Live Oak Drive
  - George Washington Memorial Parkway
- Identify right of way impacts
- Develop conceptual cost estimate and project schedule
- Ongoing: Survey, Geotech Borings
Interchange Options at GW Parkway
Bicycle and Pedestrian Facility Improvements

- Preliminary design includes improvements for cyclists and pedestrians
  - Coordinating with Fairfax County Department of Transportation
  - Consistent with Fairfax County bike plan

- Trails along I-495 corridor
  - Shared-use path behind the noise wall
  - On-road facilities using local roadways

- Improvements at overpasses
  - Old Dominion Drive (VA 783)
  - Georgetown Pike (VA 193)
  - Live Oak Drive
Typical Section: Mainline Dulles Toll Road to Georgetown Pike

This typical section is a representation of the lane configurations throughout the project and will vary along the corridor to account for interchange connections and constraints.

The existing northbound part-time shoulder lane is planned to be maintained as part of the initial implementation phase.
Live Oak Drive Design Concept
Georgetown Pike Design Concept
Old Dominion Drive Design Concept
Environmental Analysis Process

**Study Area**
Broad area near a project where study team collects data and develops environmental inventory

**Limits of Disturbance**
Narrower portion of Study Area where construction-related activities may occur

**Design Footprint**
Within the Limits of Disturbance, final design further avoids and minimizes project impacts
Agency Stakeholder Coordination

- Fairfax County Department of Transportation
- Fairfax County Park Authority
- Federal Highway Administration
- Maryland Department of Transportation
- Metropolitan Washington Airports Authority
- Metropolitan Washington Council of Governments
- National Park Service
- Northern Virginia Transportation Authority
- Virginia Department of Rail and Public Transportation
Regional Coordination

- I-495 Northern Extension is an independent, stand-alone project
- Closely coordinated to be compatible with plans for I-495 in Maryland
- Can proceed to design and construction as a stand-alone project
- Design concepts are being developed to:
  - Tie into the existing American Legion Bridge; and also
  - Tie into a future, widened American Legion Bridge (with minor adjustments)
Project Delivery

- January 2019: VDOT signed Development Framework Agreement with Transurban to extend 495 Express Lanes as a concessionaire’s enhancement under current 495 Express Lanes agreement with no Commonwealth funding
- Subject to VDOT approval, Transurban has an opportunity to submit a binding proposal that meets project-delivery technical and financial criteria and all the commitments established in the environmental study

VDOT Responsibilities
- Planning and environmental approvals
- Interchange Justification Report (IJR)
- Federal, state and local agency coordination

Transurban Responsibilities
- Preliminary engineering and design, subject to all regulatory approvals
- Finance plan
- Competitive design-build contractor procurement process
# Key Milestones

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<thead>
<tr>
<th>SCHEDULE</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2023</th>
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<tr>
<td>Public Outreach</td>
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<td>Ongoing</td>
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<tr>
<td>Public Meeting #1 (June 11, 2018)</td>
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<td>June</td>
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<td>Public Meeting #2 (May 20, 2019)</td>
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<td>May</td>
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<td>Environmental Public Hearing</td>
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<td>Fall</td>
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<td>Environmental Document Final Decision</td>
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<td>December</td>
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<tr>
<td>Final Contract</td>
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<td>2020</td>
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<tr>
<td>Construction Start</td>
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<td>Late 2020</td>
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<td>Open to Traffic</td>
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<td>2023</td>
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- Environmental Assessment Begins: Spring 2018
- Public Information Meeting #1: June 2018
- Public Information Meeting #2: May 2019
- Draft Environmental Assessment: Fall 2019
- NEPA Public Hearing: Fall 2019
- Environmental Document Final Decision: December 2019
- Detailed Design Phase: 2020
- Project Delivery Final Design Right of Way Construction: Late 2020
- Open to Traffic: 2023

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Virginia Department of Transportation
Project Website: www.495NorthernExtension.org
Questions and Feedback

- In-person tonight
- Comment form (in-person, by mail, or at 495NorthernExtension.org/comments)
- Email 495NorthernExtension@vdot.virginia.gov

Comments received by June 10, 2019 will be included in the official summary